

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Nemerow *et al.*
Serial No.: 09/903,327
Filed: July 10, 2001
Customer No.: 24961
Confirmation No.: 7374
For: *BIFUNCTIONAL MOLECULES AND
VECTORS COMPLEXED THEREWITH
FOR TARGETED GENE DELIVERY*
Art Unit: 1632
Examiner: Wehbe, A.M.S.

03 OCT -7 PM 8:06

TRANSMITTAL LETTER

Commissioner for Patents
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

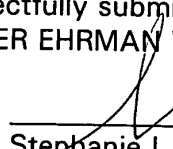
Dear Sir:

Transmitted herewith via hand delivery are a Supplemental Information Disclosure Statement, Form PTO-1449 (3 Pages) and cited references for filing in connection with the above-identified application.

- (X) The Commissioner is hereby authorized to charge the fee for the Information Disclosure Statement and any other fees that may be due under 37 C.F.R. §§1.16-1.17 in connection with this paper or with this application during its entire pendency to Deposit Account No. 50-1213. A duplicate of this sheet is enclosed.

Respectfully submitted
HELLER EHRMAN WHITE & McAULIFFE LLP

By:


Stephanie L. Seidman
Registration No. 33,779

Dated: October 6, 2003
Attorney Docket No. 22908-1228B
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IN ACCORDANCE
WITH 37 C.F.R. §§ 1.97-1.98

Commissioner for Patents
U.S. Patent and Trademark Office
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Since this Supplemental Information Disclosure Statement is filed after receipt of a first Office Action on the merits for the above-captioned application, the filing fee of \$180.00 is enclosed. If no proper payment is enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-1213.

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the Patent Office of all references known by Applicant or Applicant's representative that may be material to the examination of the subject application, Applicant's representative hereby provides this Supplemental Information Disclosure Statement that is prepared in accordance with 37 C.F.R. §§ 1.97-1.98. The Form PTO-1449 (3 pages) and cited references are provided herewith.

The documents listed on the Form PTO-1449 are in the English language, with the exception of items L and O, which are in the French language. Item L (WO 95/02697) is provided with an English language Derwent abstract (item AE). Item O (WO 95/26409) is provided with a Certified English language translation (item AD). Hence, in accordance with the requirements of 37 C.F.R. § 1.98, as amended effective March 16, 1992, no further explanation of the listed items is necessary.

Applicant also makes known to the Examiner the following U.S. and International applications, which are commonly owned and/or have one or more inventors in common:

U.S.S.N. 09/903,327

Nemerow *et al.*

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| <u>U.S.S.N.</u> | <u>Filing Date</u> | <u>Docket No.</u> |
|-----------------|--------------------|-------------------|
| 10/422,934 | 04/23/03 | 22908-1227C |
| 10/410,907 | 04/08/03 | 22908-1229 |
| 10/403,337 | 03/27/03 | 22908-1236B |
| 60/478,008 | 06/11/03 | 22908-P1237 |
| 60/467,500 | 05/01/03 | 22908-P1238 |
| 60/459,000 | 03/28/03 | 22908-P1239 |

| <u>Int'l App. no.</u> | <u>Filing Date</u> | <u>Docket No.</u> |
|-----------------------|--------------------|-------------------|
| PCT/US03/10856 | 04/08/03 | 22908-1229PC |
| PCT/US03/02295 | 01/24/03 | 22908-1236PC |

Although these documents are made known to the Patent and Trademark Office in compliance with Applicant's duty of disclosure, such disclosure is not to be construed as an admission by Applicant or Applicant's representative that any of the references, singly or in any combination thereof, is effective as prior art against the subject application. In accordance with 37 C.F.R. §1.97(h), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. §1.56(b) exists.

* * *

Applicant respectfully requests that the Examiner review the foregoing references and information and that they be made of record in the file history of the above-captioned application.

Respectfully submitted,
HELLER EHRMAN WHITE & MCAULIFFE LLP

By:

Stephanie L. Seidman
Registration No. 33,779

Dated: October 6, 2003

Attorney Docket No. 22908-1228B

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FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENTATTY. DOCKET NO.
22908-1228BSERIAL NO.
09/903,327CONFIRM NO.
7374APPLICANT
NEMEROW *et al.*CUSTOMER NO.
24961FILING DATE
July 10, 2001GROUP
1632

* If an asterisk is placed beside the reference number, a copy is NOT provided because the reference was previously cited by or submitted to the PTO in a prior application that is identified in the statement and relied upon for an earlier filing date under 35 U.S.C. 120. 37 C.F.R. § 1.98(d).

+ Derwent English language abstract and/or English translation provided.

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | *Ref. Code | DOCUMENT NUMBER | | | | | | | DATE | NAME | CLASS | SUB CLASS | FILING DATE |
|---------------------|---------------|-----------------|---|---|---|---|---|---|----------|-------------------|-------|--------------|----------------|
| | A | 5 | 7 | 5 | 0 | 3 | 9 | 6 | 05/12/98 | Yang et al. | 435 | 357 | 05/08/95 |
| | B | 5 | 7 | 5 | 6 | 0 | 8 | 6 | 05/26/98 | McClelland et al. | 424 | 93.2 | 02/06/96 |
| | C | 5 | 9 | 2 | 2 | 5 | 7 | 6 | 07/13/99 | He et al. | 435 | 91.41 | 02/27/98 |
| | D | 5 | 9 | 3 | 5 | 9 | 3 | 5 | 08/10/99 | Connelly et al. | 514 | 44 | 06/07/95 |
| | E | 5 | 9 | 6 | 5 | 5 | 4 | 1 | 10/12/99 | Wickham et al. | 514 | 44 | 11/28/95 |
| | F | 5 | 9 | 9 | 4 | 1 | 2 | 8 | 11/30/99 | Fallaux et al. | 435 | 325 | 03/25/97 |
| | G | 5 | 9 | 9 | 8 | 2 | 0 | 5 | 12/07/99 | Hallenbeck et al. | 435 | 325 | 07/01/97 |
| | H | 6 | 0 | 3 | 3 | 9 | 0 | 8 | 03/07/00 | Bout et al. | 435 | 325 | 07/15/97 |
| | I | 6 | 0 | 5 | 7 | 1 | 5 | 5 | 05/02/00 | Wickham et al. | 435 | 325 | 08/06/98 |

FOREIGN PATENT DOCUMENTS

| EXAMINER INITIAL | *Ref. Code | DOCUMENT NUMBER | | | | | | | DATE | COUNTRY | CLASS | SUB CLASS | Translation Yes No | |
|---------------------|---------------|-----------------|---|---|---|---|---|---|----------|---------|-------|--------------|-----------------------|-----|
| | J | 9 | 4 | 1 | 7 | 8 | 3 | 2 | 08/18/94 | PCT | | | | |
| | K | 9 | 5 | 0 | 0 | 6 | 5 | 5 | 01/05/95 | PCT | | | | |
| | L | 9 | 5 | 0 | 2 | 6 | 9 | 7 | 01/26/95 | PCT | | | | X + |
| | M | 9 | 5 | 0 | 5 | 2 | 0 | 1 | 02/23/95 | PCT | | | | |
| | N | 9 | 5 | 1 | 1 | 9 | 8 | 4 | 05/04/95 | PCT | | | | |
| | O | 9 | 5 | 2 | 6 | 4 | 0 | 9 | 10/05/95 | PCT | | | X + | |
| | P | 9 | 5 | 2 | 6 | 4 | 1 | 2 | 10/05/95 | PCT | | | | |
| | Q | 9 | 5 | 2 | 7 | 0 | 7 | 1 | 10/12/95 | PCT | | | | |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Title: **BIFUNCTIONAL MOLECULES AND VECTORS COMPLEXED THEREWITH FOR TARGETED GENE DELIVERY**

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| FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT | ATTY. DOCKET NO. 22908-1228B | SERIAL NO. 09/903,327 | CONFIRM NO. 7374 |
| | APPLICANT NEMEROW <i>et al.</i> | CUSTOMER NO. 24961 | |
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| EXAMINER INITIAL | *Ref. Code | DOCUMENT NUMBER | | | | | | | DATE | COUNTRY | CLASS | SUB CLASS | Translation | |
|---------------------|---------------|-----------------|---|---|---|---|---|---|----------|---------|-------|--------------|-------------|----|
| | | | | | | | | | | | | | Yes | No |
| | R | 9 | 6 | 1 | 4 | 0 | 6 | 1 | 05/17/96 | PCT | | | | |
| | S | 9 | 6 | 1 | 7 | 0 | 5 | 3 | 06/06/96 | PCT | | | | |
| | T | 9 | 6 | 1 | 8 | 4 | 1 | 8 | 06/20/96 | PCT | | | | |
| | U | 9 | 6 | 3 | 9 | 5 | 3 | 0 | 12/12/96 | PCT | | | | |
| | V | 9 | 7 | 2 | 1 | 8 | 2 | 6 | 06/19/97 | PCT | | | | |
| | W | 9 | 8 | 1 | 7 | 7 | 8 | 3 | 04/30/98 | PCT | | | | |
| | X | 9 | 8 | 2 | 2 | 6 | 0 | 9 | 05/28/98 | PCT | | | | |
| | Y | 9 | 8 | 4 | 4 | 1 | 2 | 1 | 10/08/98 | PCT | | | | |
| | Z | 9 | 8 | 5 | 0 | 0 | 5 | 3 | 11/12/98 | PCT | | | | |
| | AA | 9 | 8 | 5 | 4 | 3 | 4 | 6 | 12/03/98 | PCT | | | | |
| | AB | 9 | 9 | 2 | 5 | 8 | 6 | 0 | 05/27/99 | PCT | | | | |
| | AC | 9 | 9 | 3 | 6 | 5 | 4 | 5 | 07/22/99 | PCT | | | | |

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | |
|----|--|
| AD | Certified English Translation of PCT Application No. WO 95/26409, "Recombinant adenoviruses coding for basic fibroblast growth factors (bFGF)" |
| AE | DERWENT #010166087, WPI Acc. No.: 1995-067340/199509 for Patent No. WO 9502697, "New defective recombinant adenovirus for gene therapy - contains inverted terminal repeats, encapsidation sequence and heterologous DNA, also cell lines able to complement the virus defect" |
| AF | Gall <i>et al.</i> , "Adenovirus type 5 and 7 capsid chimera: fiber replacement alters receptor tropism without affecting primary immune neutralization epitopes", <i>J. Virol.</i> 70(4):2116-2123 (1996) |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Title: **BIFUNCTIONAL MOLECULES AND VECTORS COMPLEXED THEREWITH FOR TARGETED GENE DELIVERY**

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+ Derwent English language abstract and/or English translation provided.

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|----|---|
| | AG | Mathias <i>et al.</i> , "Multiple adenovirus serotypes use <i>av</i> integrins for infection" <i>J. Virol.</i> 68(10):6811-6814 (1994) |
| | AH | Michael <i>et al.</i> , "Addition of a short peptide ligand to the adenovirus fiber protein", <i>Gene Ther.</i> 2:660-668 (1995) |
| | AI | Roelvink <i>et al.</i> , "Identification of a conserved receptor-binding site on the fiber proteins of CAR-recognizing adenoviridae", <i>Science</i> 286:1568-1571 (1999) |
| | AJ | Stevenson <i>et al.</i> , "Human adenovirus serotypes 3 and 5 bind to two different cellular receptors via the fiber head domain", <i>J. Virol.</i> 69(5):2850-2857 (1995) |
| | AK | Stevenson <i>et al.</i> , "Selective targeting of human cells by a chimeric adenovirus vector containing a modified fiber protein", <i>J. Virol.</i> 71(6):4782-4790 (1997) |

EXAMINER

DATE CONSIDERED

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